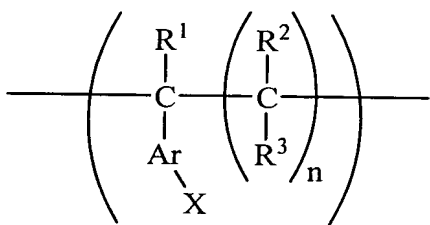


## CLAIMS

1. An agent for inhibiting decrease in measured values in immunoassays, caused by an interfering substance(s), which agent is an ionic surfactant having a molecular weight of 1000 to 100,000, said ionic surfactant being a polymer in which a hydrophobic cyclic monomer(s) having an ionic functional group(s) is(are) polymerized.

2. The agent for inhibiting decrease in measured values in immunoassays according to claim 1, wherein said polymer comprises a recurring unit represented by the following Formula [I]:



[ I ]

wherein Ar represents a hydrophobic ring; X represents the ionic functional group;  $R^1$  to  $R^3$  independently represent hydrogen or alkyl; n represents an integer of 0 to 10; hydrogen atom(s) bound to a carbon atom(s) constituting Ar optionally being substituted with a substituent(s) which does(do) not adversely affect the effect of the present invention.

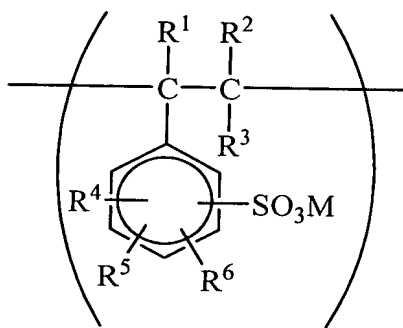
3. The agent for inhibiting decrease in measured values in immunoassays according to claim 1 or 2, wherein said hydrophobic cyclic monomer is an aromatic monomer.

4. The agent for inhibiting decrease in measured values in immunoassays according to claim 3, wherein said aromatic monomer has a benzene ring.

5. The agent for inhibiting decrease in measured values in immunoassays according to any one of claim 1 to 4, wherein said ionic functional group is sulfonic group or a salt thereof, carboxylic group or a salt thereof, or an amine.

6. The agent for inhibiting decrease in measured values in immunoassays according to claim 5, wherein said ionic functional group is sulfonic group or a salt thereof.

7. The agent for inhibiting decrease in measured values in immunoassays according to claim 2, wherein said recurring unit is represented by the following Formula [II]:



[ II ]

wherein M represents an atom or a group which becomes a monovalent cation in aqueous solution; R<sup>1</sup> to R<sup>3</sup> have the same meanings as said R<sup>1</sup> to R<sup>3</sup> in said Formula [I]; and R<sup>4</sup> to R<sup>6</sup> independently represent hydrogen, lower alkoxy or lower alkyl.

8. The agent for inhibiting decrease in measured values in immunoassays according to claim 5, wherein said recurring unit is an anethole sulfonic acid salt or styrene sulfonic acid salt.

9. The agent for inhibiting decrease in measured values in immunoassays according to any one of claims 1 to 9, wherein said immunoassay is an immunoagglutination method.

10. An immunoassay which is carried out in the presence of said agent for inhibiting decrease in measured values in immunoassays according to any one of claims 1 to 9.

11. The immunoassay according to claim 10, comprising a first step of bringing a test sample into contact with said agent for inhibiting decrease in measured values in

immunoassays; and a second step of subjecting said test sample to antigen-antibody reaction with sensitized particles or with an antiserum.

12. The immunoassay according to claim 10 or 11, wherein said test sample is a biological sample.

5 13. The immunoassay according to claim 12, wherein said test sample is blood, serum or blood plasma.

14. The immunoassay according to any one of claims 10 to 13, wherein the concentration of said agent for inhibiting decrease in measured values in immunoassays in reaction solution is 0.01% to 5% (weight/volume).

10 15. The immunoassay according to any one of claims 10 to 14, which is an immunoagglutination method.

16. A reagent for immunoassays comprising at least a buffer and sensitized particles or an antiserum, characterized by further comprising said agent for inhibiting decrease in measured values in immunoassays according to any one of  
15 claims 1 to 9.

17. The reagent according to claim 14, which is a binary liquid reagent comprising a first reagent including at least a buffer, said first reagent being firstly mixed with a test sample; and a second reagent including at least a buffer and said sensitized particles, said second reagent being added to the mixture of said test  
20 sample and said first reagent.

18. The reagent according to claim 16 or 17, wherein said immunoassay is immunoagglutination method.

19. Use of said ionic surfactant recited in any one of claims 1 to 9 as an agent for inhibiting decrease in measured values in immunoassays.

25 20. A method for inhibiting decrease in measured values in immunoassays, which method comprises making said ionic surfactant recited in any one of claims 1 to 9 coexist in reaction solution of said immunoassay.